

<b>Notice of Allowability</b>	Application No.	Applicant(s)	
	10/076,720	JOVANOVIC ET AL.	
	Examiner	Art Unit	
	John D. Lee	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on March 18, 2004.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 18 March 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

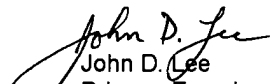
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|   | 9. <input type="checkbox"/> Other _____.   |

  
 John D. Lee  
 Primary Examiner  
 Art Unit: 2874

### EXAMINER'S AMENDMENT

An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Claim 10 has been rewritten as follows:

10.(Twice amended) A high-gain preamplifier based on optical parametric amplification using a seed beam having a transverse intensity profile and a diameter, comprising:

first nonlinear crystal means for amplification of a signal pulse by transfer of energy from a pump pulse [though] through difference-frequency generation;

second nonlinear crystal means for additional amplification of said signal pulse by transfer of energy from said pump pulse [though] through difference-frequency generation, operatively connected to said first nonlinear crystal;

first beam relay telescope means for relay imaging the pump transverse intensity profile, adjusting the pump beam diameter, and collimating the pump beam, operatively connected to said first nonlinear crystal means and said second nonlinear crystal means;


second beam relay telescope means for relay imaging the seed beam transverse intensity profile, adjusting the seed beam diameter, and collimating the seed beam, operatively connected to said first nonlinear crystal means, said second nonlinear crystal means, and said first beam relay telescope means;

first harmonic beamsplitter means for nearly collinear coupling of the seed beam with the pump beam into the first nonlinear crystal, operatively connected to said first nonlinear crystal means, said second nonlinear crystal means, said first beam relay telescope means, and said [first] second beam relay telescope means; and

second harmonic beamsplitter means for separating the amplified signal and idler beams from the residual pump after amplification in the second nonlinear crystal; operatively connected to said first nonlinear crystal means, said second nonlinear crystal means, said first beam relay telescope means, said second beam relay telescope means, and said [second] first harmonic beamsplitter means.

Authorization for this Examiner's amendment was given in a telephone interview with the attorney Mr. Eddie E. Scott on April 8, 2004.

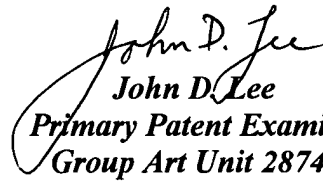
The above-identified changes to claim 10 correct a misspelling of the word "through" and correct the incorrect change from "second" to "first" made in the amendment of March 18, 2004. That change should have been made to the next-to-last line of claim 10, but was inadvertently made to line 20 thereof.

Claims 1-20 of this application remain allowable for the reasons stated in the previous Office action (mailed December 24, 200<sup>3</sup>~~4~~). 

Any inquiry concerning the merits of this communication should be directed to Examiner John D. Lee at telephone number (571) 272-2351. The Examiner's normal work schedule is Tuesday through Friday, 6:30 AM to 5:00 PM. Any inquiry of a general

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or clerical nature (i.e. a request for a missing form or paper, etc.) should be directed to the Technology Center 2800 receptionist at telephone number (571) 272-1562, to the technical support staff supervisor (Team 8) at telephone number (571) 272-1564, or to the Technology Center 2800 Customer Service Office at telephone number (571) 272-1626.

  
**John D. Lee**  
**Primary Patent Examiner**  
**Group Art Unit 2874**